Page 2

The following <u>Listing of the Claims</u> will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

1. (Previously presented) A composition comprising an antigen bearing target and further comprising a fusion polypeptide, said fusion polypeptide comprising

a first amino acid sequence which can bind to a carbohydrate

and

a second amino acid sequence comprising the amino acid sequence of a ligand for a cell surface polypeptide, said ligand being chosen from the group: a ligand for a cytokine receptor, a ligand for CD40, a ligand for an adhesion molecule, a ligand for a defensin receptor, a ligand for a heat shock protein receptor, a ligand for a T cell costimulatory molecule, a ligand for a counterreceptor for a T cell costimulatory molecule;

wherein said antigen bearing target comprises at least one of the following: a viral antigen, a bacterial antigen, a fungal antigen, a parasite antigen, a prion antigen.

- 2. (Original) The composition of claim 1, wherein said antigen bearing target is chosen from the group: a virus, a bacterial cell, a fungal cell, a cell of a parasite, a prion, a mammalian cell, an insect cell, a polypeptide free of other cell-derived material.
- 3. (Original) The composition of claim 2, wherein said antigen bearing target is pathogenic.
- 4. (Original) The composition of claim 2, wherein said antigen bearing target is attenuated.
- 5. (Original) The composition of claim 1, wherein said antigen bearing target is a cell which is substantially unable to divide.
- 6. (Original) The composition of claim 2, wherein said antigen bearing target is a cell and said fusion polypeptide is exogenous to said cell.

Page 3

7. (Original) The composition of claim 2, wherein said antigen bearing target is a cell and said fusion polypeptide is endogenous to said cell and is encoded by a nucleic acid sequence comprised by the cell.

- 8. (Original) The composition of claim 1, wherein said first amino acid sequence is N-terminal to said second amino acid sequence.
- 9. (Original) The composition of claim 1, wherein said first amino acid sequence is C-terminal to said second amino acid sequence.
- 10. (Original) The composition of claim 1, wherein said first amino acid sequence can bind to a sialic acid on a glycoprotein, said sialic acid comprising at least one of the following carbohydrate structures: N-acetylneuraminic acid, alpha-NeuNAc-[2->6]-Gal, alpha-NeuNAc-[2->6]-GalNAc, alpha-NeuNAc-[2->3]-Gal.
- 11. (Original) The composition of claim 1, wherein said first amino acid sequence comprises a carbohydrate-binding domain of a naturally occurring lectin.
- 12. (Previously presented) The composition of claim 1, wherein said first amino acid sequence comprises at least 10 contiguous amino acids of a hemagglutinin.
- 13. (Original) The composition of claim 12, wherein said hemagglutinin is an influenza virus hemagglutinin.
- 14. (Original) The composition of claim 13, wherein said contiguous amino acids of an influenza hemagglutinin are contiguous amino acids of an influenza hemagglutinin HA1 domain.
- 15. (Original) The composition of claim 13, wherein said influenza virus is an influenza A virus.
- 16. (Original) The composition of claim 15, wherein said influenza virus is of a subtype that infects humans.

Page 4

17. (Original) The composition of claim 15, wherein said influenza virus is of an H1 subtype.

- 18. (Original) The composition of claim 17, wherein said influenza virus is from the strain A/PR/8/34.
- 19. (Original) The composition of claim 18, wherein said influenza virus is of an H2 or H3 subtype.
- 20. (Original) The composition of claim 13, wherein said influenza virus is of a subtype that does not infect humans.
- 21. (Original) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a mammalian cell surface polypeptide.
- 22. (Original) The composition of claim 21, wherein said ligand for a cell surface polypeptide is a ligand for a mouse cell surface polypeptide.
- 23. (Original) The composition of claim 21, wherein said ligand for a cell surface polypeptide is a ligand for a human cell surface polypeptide.
- 24. (Original) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a cell surface polypeptide of a leukocyte.
- 25. (Original) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a cell surface polypeptide of an antigen presenting cell.
- 26. (Original) The composition of claim 25, wherein said ligand for a cell surface polypeptide is a ligand for a cell surface polypeptide of a professional antigen presenting cell.
- 27. (Original) The composition of claim 24, wherein said ligand for a cell surface polypeptide is a ligand for a cell surface polypeptide of a dendritic cell.
- 28. (Original) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a mouse GM-CSF receptor.

Page 5

- 29. (Cancelled)
- 30. (Original) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises a mouse GM-CSF.
- 31. (Original) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a human GM-CSF receptor.
- 32. (Cancelled)
- 33. (Original) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises a human GM-CSF.
- 34. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for an interleukin.
- 35. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for a mouse interleukin.
- 36. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for a human interleukin.
- 37. (Withdrawn) The composition of claim 34, wherein said interleukin is chosen from the group: IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12, IL-13, IL-14, IL-15, IL-16, IL-17, IL-18, IL-19, IL-20, IL-21, IL-22, IL-23, IL-24, IL-25.
- 38. (Withdrawn) The composition of claim 34, wherein said ligand for a cell surface polypeptide comprises at least about 5 contiguous amino acids of an interleukin.
- 39. (Withdrawn) The composition of claim 38, wherein said interleukin is chosen from the group: IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12, IL-13, IL-14, IL-15, IL-16, IL-17, IL-18, IL-19, IL-20, IL-21, IL-22, IL-23, IL-24, IL-25.
- 40. (Withdrawn) The composition of claim 34, wherein said ligand for a cell surface polypeptide comprises an interleukin.

Page 6

41. (Withdrawn) The composition of claim 40, wherein said interleukin is chosen from the group: IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12, IL-13, IL-14, IL-15, IL-16, IL-17, IL-18, IL-19, IL-20, IL-21, IL-22, IL-23, IL-24, IL-25.

- 42. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for a chemokine.
- 43. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for a mouse chemokine.
- 44. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for a human chemokine.
- 45. (Withdrawn) The composition of claim 42, wherein said chemokine is a C-C cytokine.
- 46. (Withdrawn) The composition of claim 42, wherein said chemokine is a C-X-C cytokine.
- 47. (Withdrawn) The composition of claim 42, wherein said cell surface polypeptide is chosen from the group: CXCR-1, CXCR-2, CXCR-3, CXCR-4, CCR-1, CCR-2, CCR-3, CCR-4, CCR-5, CCR-6, CCR-7, CCR-8.
- 48. (Withdrawn) The composition of claim 42, wherein said chemokine is chosen from the group: 9E3, AMCF, beta-thromboglobulin, ENA-78, eotaxin, eotaxin-2, IP-10, KC, LIX, mig, MGSA, mob-1, NAP-2, NAP-3, NAP-4, PBSF, MGSA, mouse KC, MIP-2, MIP-1 alpha, NAP-2, ENA-78, GCP-2, ACT-2, C10, CCF18, DC-CK1, ELC, Exodus, FIC, GDCF, GDCF-2, HC-21, HCC-1, I-309, JE, LAG-1, MARC, MCAF, MCP-1, MCP-2, MCP-3, MCP-4, MCP-5, MRP-2, RANTES SDF, TARC, ATAC, Ltn, SCM-1, neurotactin.
- 49. (Withdrawn) The composition of claim 42, wherein said ligand for a cell surface polypeptide comprises at least about 5 contiguous amino acids of a chemokine.
- 50. (Withdrawn) The composition of claim 49, wherein said chemokine is chosen from the group: 9E3, AMCF, beta-thromboglobulin, ENA-78, eotaxin, eotaxin-2, IP-10, KC, LIX,

Page 7

mig, MGSA, mob-1, NAP-2, NAP-3, NAP-4, PBSF, MGSA, mouse KC, MIP-2, MIP-1 alpha, NAP-2, ENA-78, GCP-2, ACT-2, C10, CCF18, DC-CK1, ELC, Exodus, FIC, GDCF, GDCF-2, HC-21, HCC-1, I-309, JE, LAG-1, MARC, MCAF, MCP-1, MCP-2, MCP-3, MCP-4, MCP-5, MRP-2, RANTES SDF, TARC, ATAC, Ltn, SCM-1, neurotactin.

- 51. (Withdrawn) The composition of claim 42, wherein said ligand for a cell surface polypeptide comprises a chemokine.
- 52. (Withdrawn) The composition of claim 51, wherein said chemokine is chosen from the group: 9E3, AMCF, beta-thromboglobulin, ENA-78, eotaxin, eotaxin-2, IP-10, KC, LIX, mig, MGSA, mob-1, NAP-2, NAP-3, NAP-4, PBSF, MGSA, mouse KC, MIP-2, MIP-1 alpha, NAP-2, ENA-78, GCP-2, ACT-2, C10, CCF18, DC-CK1, ELC, Exodus, FIC, GDCF, GDCF-2, HC-21, HCC-1, I-309, JE, LAG-1, MARC, MCAF, MCP-1, MCP-2, MCP-3, MCP-4, MCP-5, MRP-2, RANTES SDF, TARC, ATAC, Ltn, SCM-1, neurotactin.
- 53. (Withdrawn) The composition claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for an interferon.
- 54. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for a mouse interferon.
- 55. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a receptor for a human interferon.
- 56. (Withdrawn) The composition of claim 53, wherein said interferon is chosen from the group: an interferon-alpha, an interferon-beta, an interferon gamma.
- 57. (Withdrawn) The composition of claim 53, wherein said ligand for a cell surface polypeptide comprises at least about 5 contiguous amino acids of an interferon.
- 58. (Withdrawn) The composition of claim 57, wherein said interferon is chosen from the group: an interferon-alpha, an interferon-beta, an interferon gamma.

Page 8

59. (Withdrawn) The composition of claim 53, wherein said ligand for a cell surface polypeptide comprises an interferon.

- 60. (Withdrawn) The composition of claim 59, wherein said interferon is chosen from the group: an interferon-alpha, an interferon-beta, an interferon gamma.
- 61. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a mouse TNF-alpha receptor.
- 62. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises at least about five contiguous amino acids of a mouse TNF-alpha.
- 63. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises a mouse TNF-alpha.
- 64. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a human TNF-alpha receptor.
- 65. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises at least about five contiguous amino acids of a human TNF-alpha.
- 66. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises a human TNF-alpha.
- 67. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a mouse flt-3 receptor.
- 68. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises at least about five contiguous amino acids of a mouse flt-3.
- 69. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises a mouse flt-3.
- 70. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide is a ligand for a human flt-3 receptor.

Page 9

71. (Withdrawn) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises at least about five contiguous amino acids of a human flt-3.

- 72. (Original) The composition of claim 1, wherein said ligand for a cell surface polypeptide comprises a human flt-3.
- 73. (Original) The composition of claim 1, wherein said fusion polypeptide further comprises a linker interposed between said first and second amino acid sequences.
- 74. (Original) The composition of claim 73, wherein said linker has the formula (Gly_xSer)_n, wherein n is an integer between 1 and 15, and x is an integer between 1 and 10.
- 75. (Original) The composition of claim 1, which comprises said fusion polypeptide bound to a carbohydrate on said antigen bearing target.
- 76. (Original) The composition of claim 1, in which at least some of said fusion polypeptide is not bound to said antigen bearing target.
- 77. (Original) The composition of claim 1, wherein said antigen bearing target is a cell and said composition comprises said fusion polypeptide bound to a carbohydrate on the surface of said cell.